10/530,446

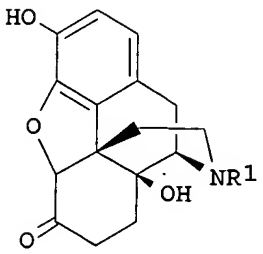
STN - Structure Search 10/4/06

=> d ibib abs hitstr 1-41

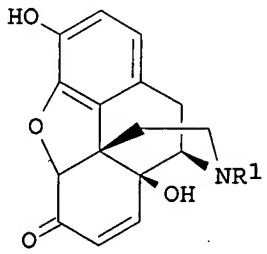
L9 ANSWER 1 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:818092 CAPLUS
DOCUMENT NUMBER: 145:249385
TITLE: Method for purifying noroxymorphone compounds containing unsaturated impurities
INVENTOR(S): Weigl, Ulrich; Koetz, Ulf; Freifeld, Ilia
PATENT ASSIGNEE(S): Cilag AG, Switz.
SOURCE: PCT Int. Appl., 32pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006084412	A1	20060817	WO 2006-CH87	20060209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
WO 2006084389	A1	20060817	WO 2005-CH76	20050211
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: WO 2005-CH76 A 20050211
OTHER SOURCE(S): CASREACT 145:249385
GI



I

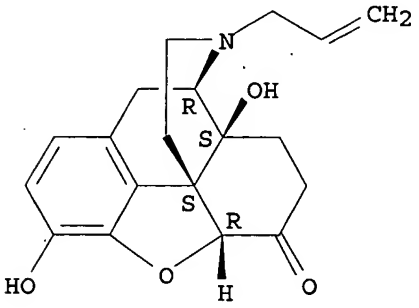


II

AB The invention relates to a method for purifying plant exts. that are substantially composed of noroxymorphone compds. I [R1 = H, C1-8-alkyl (optionally substituted with Ph or Cl, in particular allyl or

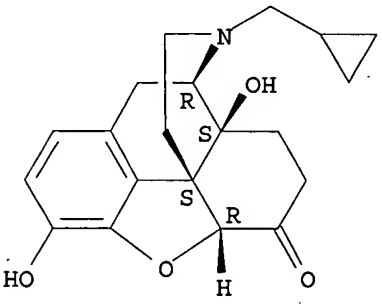
IT 465-65-6P, Naloxone 16590-41-3P, Naltrexone
RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and salt formation of; method for purifying noroxymorphone compds. containing unsatd. impurities)
RN 465-65-6 CAPLUS
CN Morphinan-6-one, 4,5-epoxy-3,14-dihydroxy-17-(2-propenyl)-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 16590-41-3 CAPLUS
CN Morphinan-6-one, 17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxy-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 2 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:817872 CAPLUS
DOCUMENT NUMBER: 145:249387
TITLE: Method for purifying noroxymorphone compounds
INVENTOR(S): Weigl, Ulrich; Koetz, Ulf; Freifeld, Ilia
PATENT ASSIGNEE(S): Cilag Ltd., Switz.
SOURCE: PCT Int. Appl., 25pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

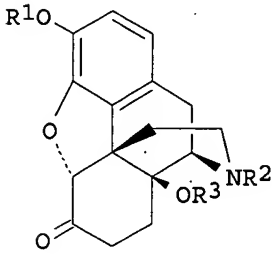
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006084389	A1	20060817	WO 2005-CH76	20050211

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

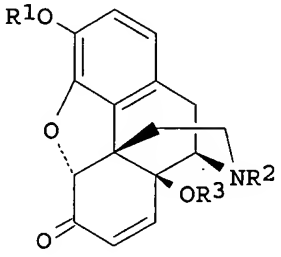
WO 2006084412 A1 20060817 WO 2006-CH87 20060209

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: WO 2005-CH76 A 20050211
OTHER SOURCE(S): CASREACT 145:249387
GI



I

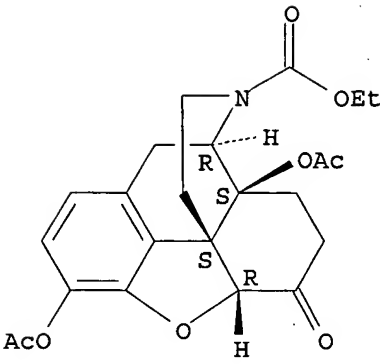


II

AB The invention relates to a method for purifying oxymorphone compds. I [R1, R2, R3 independently represent hydrogen, optionally substituted C1-8-alkyl, C2-4-alkenyl or a leaving group] or a mixture of compds. I, or the mixture of compds. I containing at least one corresponding α,β-unsatd. compound II as an impurity, which can be separated The invention is characterized in that the oxymorphone compds. I or a mixture of said compds. I, which contain at least one corresponding α,β-unsatd. compound is subjected to a hydrogenation. The purified noroxymorphone are processed in such a manner that naltrexone or naloxone or a salt of said compds. or a quaternary derivative of said compds. are formed. Thus, purified noroxymorphone (I; R1 = R2 = R3 = H) was prepared from oxymorphone (I; R1 = Me, R2 = R3 = H) containing II (R1 = Me, R2 = R3 = H) as an impurity via acetylation with Ac2O, demethylation with ClCO2Et, hydrogenation and a two stage hydrolysis. The invention also relates to pharmaceutical formulations which contain said compound

IT 76-41-5, Oxymorphone
RL: RCT (Reactant); RACT (Reactant or reagent)
(acetylation of; method for purifying noroxymorphone compds. from unsatd. impurities)

RN 76-41-5 CAPLUS
CN Morphinan-6-one, 4,5-epoxy-3,14-dihydroxy-17-methyl-, (5α)- (9CI)



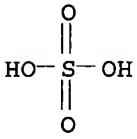
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 3 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:681645 CAPLUS
DOCUMENT NUMBER: 145:124776
TITLE: Method for the catalytic production of hydrocodone, hydromorphone, and derivatives thereof
INVENTOR(S): Wang, Peter X.; Moser, Frank W.; Cantrell, Gary L.; Magparangalan, Daniel P.; Bao, Jian
PATENT ASSIGNEE(S): Mallinckrodt Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 9 pp., Cont.-in-part of U.S. Ser. No. 973,031.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006155130	A1	20060713	US 2006-369401		20060307
US 2006074239	A1	20060406	US 2004-495503		20040513
US 2005124811	A1	20050609	US 2004-973031		20041025
AU 2004319925	A1	20051201	AU 2004-319925		20041025
PRIORITY APPLN. INFO.:			US 2004-495503	A2	20040513
			US 2004-973031	A2	20041025
			US 2005-665784P	P	20050328
			US 2002-425360P	P	20021111
			US 2003-495503	A2	20031105
			WO 2003-US35462	W	20031105
			WO 2004-US35292	W	20041025

OTHER SOURCE(S): MARPAT 145:124776
GI

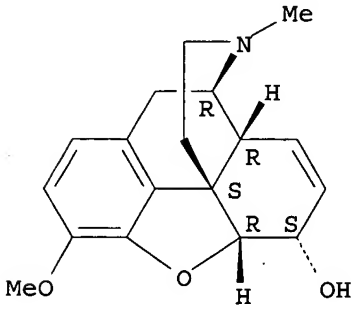
CRN 7664-93-9
CMF H2 O4 S



CM 2

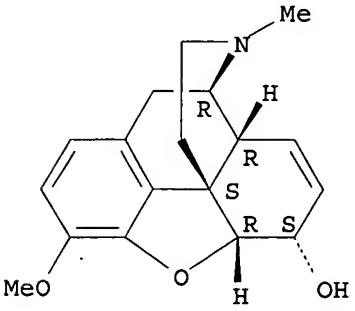
CRN 76-57-3
CMF C18 H21 N O3

Absolute stereochemistry.



RN 1422-07-7 CAPLUS
CN Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, hydrochloride, (5α,6α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

L9 ANSWER 4 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:325685 CAPLUS
DOCUMENT NUMBER: 142:397733
TITLE: Sustained release pharmaceutical compounds to prevent abuse of controlled substances
INVENTOR(S): Mickle, Travis; Krishnan, Suma; Moncrief, James Scott; Lauderback,. Christopher; Piccariello, Thomas

10/530,446

PATENT ASSIGNEE(S): New River Pharmaceuticals Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of Appl. No. PCT/US03/05525.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 20
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005080012	A1	20050414	US 2004-923257	20040823
WO 2003072046	A2	20030904	WO 2003-US5525	20030224
WO 2003072046	A3	20050310		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2006014697	A1	20060119	US 2005-89056	20050325

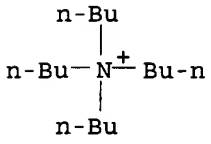
PRIORITY APPLN. INFO.:

US 2002-358368P	P	20020222
US 2002-362082P	P	20020307
WO 2003-US5525	A2	20030224
US 2001-933708	A2	20010822
US 2002-358381P	P	20020222
US 2002-366258P	P	20020322
US 2002-156527	A2	20020529
US 2003-507012P	P	20030930
US 2004-567800P	P	20040505
US 2004-567802P	P	20040505
US 2004-568011P	P	20040505
US 2004-923088	A2	20040823
US 2004-923257	A2	20040823
US 2004-953110	A2	20040930
US 2004-953111	A2	20040930
US 2004-953116	A2	20040930
US 2004-953119	A2	20040930
US 2004-955006	A2	20040930
WO 2004-US32131	A2	20040930

AB The present invention provides methods for altering controlled substances in a manner that decreases their potential for abuse. The novel compds. may be combined in tablets with suitable excipients or formulated in solution for oral delivery. When delivered by the oral route the controlled substance is released in a time-dependent manner (sustained release) by acid hydrolysis and/or enzymic cleavage. When administered by injection the controlled substance is released in a time-dependent manner (sustained release) by way of serum enzymes. Conjugates such as polyserine-naltrexone and hydrocodone and oxycodone peptide conjugates were prepared and their pharmacokinetics and analgesic effect studied.

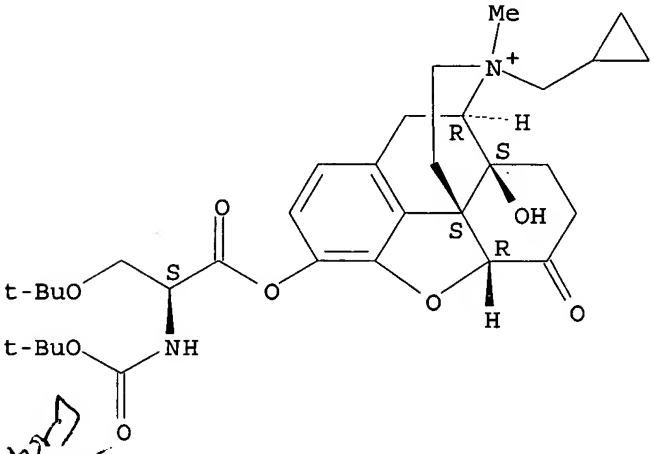
IT 76-42-6, Oxycodone 125-29-1, Hydrocodone
RL: PAC (Pharmacological activity); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(sustained release pharmaceutical compds. to prevent abuse of controlled substances)

RN 76-42-6 CAPLUS
CN Morphinan-6-one, 4,5-epoxy-14-hydroxy-3-methoxy-17-methyl-, (5α)- (9CI) (CA INDEX NAME)



IT 849462-46-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(sustained release pharmaceutical compds. to prevent abuse of controlled substances)
RN 849462-46-0 CAPLUS
CN Morphinanium, 17-(cyclopropylmethyl)-3-[(2S)-3-(1,1-dimethylethoxy)-2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-oxopropoxy]-4,5-epoxy-14-hydroxy-17-methyl-6-oxo-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 5 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:430807 CAPLUS
DOCUMENT NUMBER: 141:7329
TITLE: Preparation of quaternary salts of morphinan alkaloids
INVENTOR(S): Cantrell, Gary L.; Halvachs, Robert E.
PATENT ASSIGNEE(S): Mallinckrodt Inc., USA
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004043964	A2	20040527	WO 2003-US35463	20031105
WO 2004043964	A3	20040826		

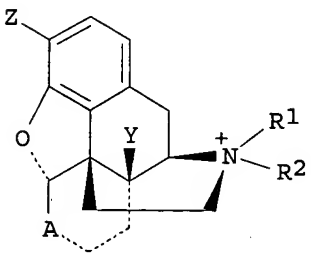
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,

BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

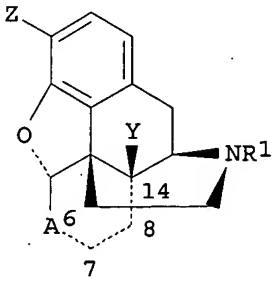
CA 2504262	AA	20040527	CA 2003-2504262		20031105
AU 2003290630	A1	20040603	AU 2003-290630		20031105
EP 1562953	A2	20050817	EP 2003-783211		20031105
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
CN 1711270	A	20051221	CN 2003-80102817		20031105
JP 2006509745	T2	20060323	JP 2004-551830		20031105
US 2006014771	A1	20060119	US 2005-530446		20050405
PRIORITY APPLN. INFO.:			US 2002-424748P	P	20021108
			US 2002-425580P	P	20021112
			WO 2003-US35463	W	20031105

OTHER SOURCE(S): CASREACT 141:7329; MARPAT 141:7329

GI



I



II

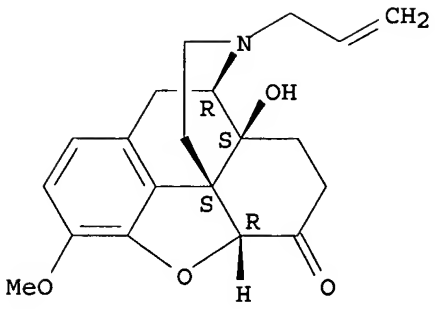
AB The present invention discloses a process for preparation of quaternary salts of morphinan alkaloids, such as I.X- [A = CO, CS, C:CH2, CHA1, CA1:; A1 = OH, alkoxy, acyloxy; R1, R2 = hydrocarbyl; X- = anion; Y, if present = H, OH, alkoxy, acyloxy; Z = OH, alkoxy, acyloxy; dashed lines = single bond; dashed line between 6 and 7 and between 8 and 14 = single bond and between 7 and 8 = double bond; dashed line between 6 and 7 and between 8 and 14 = double bod and between 7 and 8 = single bond], by the reaction of tertiary N-substituted morphinan alkaloid II with an alkyl halide in an anhydrous solvent system, wherein the solvent system comprises an aprotic dipolar solvent with the aprotic dipolar solvent constituting at least 25 wt% of the solvent system. Thus, N-cyclopropylmethyl-noroxymorphone methobromide I [A = CO; dashed line = single bond; Y = H; Z = OH, R1 = CH2CH(CH2)2; R2 = Me] was prepared by the reaction between Me bromide and naltrexone anhydrous base II [A = CO; dashed line = single bond; Y = H; Z = OH, R1 = CH2CH(CH2)2] in 1-methyl-2-pyrrolidone.

IT 73232-49-2P, Naloxone methobromide 73232-52-7P, N-Cyclopropylmethyl-noroxymorphone methobromide 693784-16-6P, N-Cyclopropylmethyl-noroxymorphone methochloride
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
(preparation of quaternary salts of morphinan alkaloids from tertiary N-substituted morphinan alkaloid and alkyl halide in an anhydrous solvent system)

RN 73232-49-2 CAPLUS

CN Morphinanium, 4,5-epoxy-3,14-dihydroxy-17-methyl-6-oxo-17-(2-propenyl)-, bromide, (5α)- (9CI) (CA INDEX NAME)

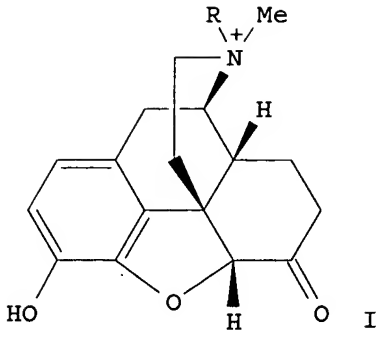
Absolute stereochemistry.



L9 ANSWER 6 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:287849 CAPLUS
DOCUMENT NUMBER: 140:321561
TITLE: Preparation of N-substituted hydromorphones as μ opioid receptor agonists for treating or preventing pain
INVENTOR(S): Kyle, Donald J.
PATENT ASSIGNEE(S): Euro-Celtique, S.A., Luxembourg
SOURCE: PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004029059	A1	20040408	WO 2003-US29876	20030924
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2500118	AA	20040408	CA 2003-2500118	20030924
US 2004067973	A1	20040408	US 2003-668326	20030924
US 6825205	B2	20041130		
AU 2003272642	A1	20040419	AU 2003-272642	20030924
EP 1543010	A1	20050622	EP 2003-754837	20030924
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003014488	A	20050802	BR 2003-14488	20030924
CN 1684967	A	20051019	CN 2003-822958	20030924
JP 2006503850	T2	20060202	JP 2004-540164	20030924
PRIORITY APPLN. INFO.:			US 2002-413254P P	20020925
			WO 2003-US29876 W	20030924

OTHER SOURCE(S): MARPAT 140:321561
GI



I

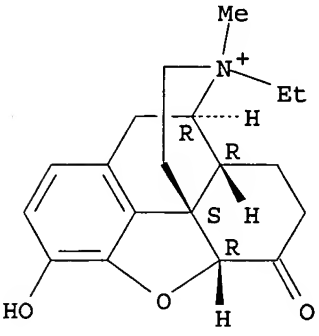
AB The present invention relates to the preparation of N-substituted hydromorphones, such as I [R = alkyl], or a pharmaceutically acceptable salt thereof, for their use as μ opioid receptor agonists for the treatment, prevention or amelioration of both acute and chronic pain. Thus, hydromorphone hydrochloride on reaction with Me iodide afforded hydromorphone methiodide I.I- [R = Me (II)]. N-methylhydromorphone I (R = Me) was evaluated as agonist of μ opioid receptor in vitro and in vivo assay (Ki = 90±28 μM and EC50 = 817 ± 83 nM).

IT 676996-91-1P 677298-55-4P, Hydromorphone methiodide
677298-56-5P, N-Methylhydromorphone
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-substituted hydromorphones as μ opioid receptor agonists for treating or preventing pain)

RN 676996-91-1 CAPLUS

CN Morphinanium, 4,5-epoxy-17-ethyl-3-hydroxy-17-methyl-6-oxo-, (5α)- (9CI) (CA INDEX NAME)

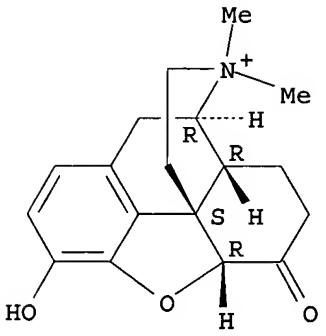
Absolute stereochemistry.



RN 677298-55-4 CAPLUS

CN Morphinanium, 4,5-epoxy-3-hydroxy-17,17-dimethyl-6-oxo-, iodide, (5α)- (9CI) (CA INDEX NAME)

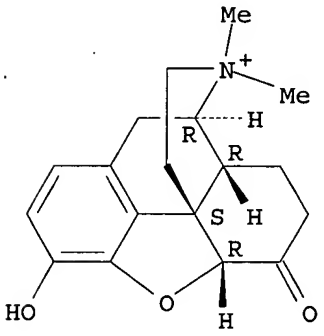
Absolute stereochemistry.



● I^-

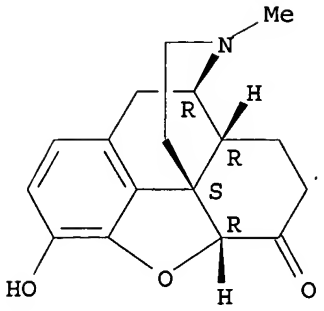
RN 677298-56-5 CAPLUS
CN Morphinanium, 4,5-epoxy-3-hydroxy-17,17-dimethyl-6-oxo-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 71-68-1, Hydromorphone hydrochloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of N-substituted hydromorphones as μ opioid receptor agonists for treating or preventing pain)
RN 71-68-1 CAPLUS
CN Morphinan-6-one, 4,5-epoxy-3-hydroxy-17-methyl-, hydrochloride, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



● HCl

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:41476 CAPLUS
DOCUMENT NUMBER: 140:111568
TITLE: Method for production of morphinan derivatives and the quaternary ammonium salts thereof substituted in position 14, and use thereof as highly-active analgesics or also as opioid antagonists
INVENTOR(S): Schmidhammer, Helmut; Spetea, Mariana; Schuetz, Johannes; Greiner, Elisabeth; Schuellner, Falko; Sailer, Bettina; Stuebegger, Kurt
PATENT ASSIGNEE(S): Austria
SOURCE: PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

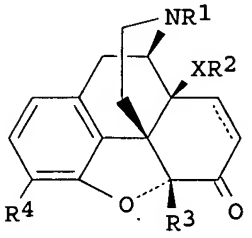
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004005294	A2	20040115	WO 2003-EP6866	20030627
WO 2004005294	A3	20040513		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10229842	A1	20040205	DE 2002-10229842	20020703
CA 2491689	AA	20040115	CA 2003-2491689	20030627
AU 2003246627	A1	20040123	AU 2003-246627	20030627
EP 1554282	A2	20050720	EP 2003-762539	20030627
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2005182258	A1	20050818	US 2003-519388	20030627
CN 1665819	A	20050907	CN 2003-815881	20030627
JP 2006500326	T2	20060105	JP 2004-518608	20030627

PRIORITY APPLN. INFO.: DE 2002-10229842 A 20020703

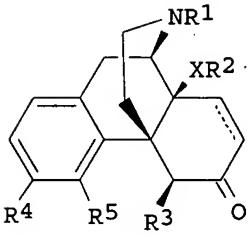
WO 2003-EP6866 W 20030627

OTHER SOURCE(S): MARPAT 140:111568

GI



I



II

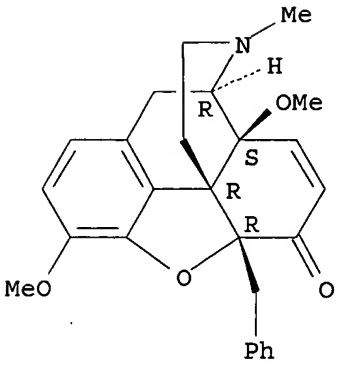
AB The invention relates to a class of morphinan compds. I [R1 = C1-6-alkyl, C2-6-alkenyl, C2-6-alkynyl, C3-16-cycloalkyl, C7-16-arylalkyl, C8-16-arylalkenyl, C8-16-arylalkynyl; R2 = H, C4-6-alkyl, C2-6-alkenyl, C2-6-alkynyl, C3-16-cycloalkyl, C7-16-arylalkyl, C8-16-arylalkenyl, C8-16-arylalkynyl, C2-6-alkenoyl, C2-6-alkynoyl, C9-16-arylalkenoyl, C9-16-arylalkynoyl; R3 = C1-6-alkyl, C2-6-alkenyl, C7-16-arylalkyl, C8-16-arylalkenyl, C1-6-alkoxy-(C1-6-alkyl); R4 = H, OH, C1-6-alkoxy, C2-10-alkoxyalkoxy, C2-6-alkenyloxy, C2-6-alkynyloxy, C3-13-cycloalkoxy, C4-16-cycloalkenyloxy, C4-16-cycloalkynyloxy, C7-16-arylalkoxy, C8-16-arylalkenyloxy, C8-16-arylalkynyloxy, C1-6-alkanoyloxy, C3-6-alkenoyloxy, C3-6-alkynoyloxy, C7-16-arylalkanoyloxy, C9-16-arylalkenoyloxy, C9-16-arylalkynoyloxy; X = O, S, CH2; dashed line = single or double bond] and II [R5 = H, OH, C1-6-alkoxy, C2-10-alkoxyalkoxy, C2-6-alkenyloxy, C2-6-alkynyloxy, C3-13-cycloalkoxy, C4-16-cycloalkenyloxy, C4-16-cycloalkynyloxy, C7-16-arylalkanoyloxy, C8-16-arylalkenoyloxy, C8-16-arylalkynoyloxy, C2-6-alkanoyloxy] and the quaternary ammonium salts thereof, substituted in position 14, which may be used as highly-active analgesics or also as opioid antagonists. Thus, morphinan I [R1 = cyclopropylmethyl, R2 = (CH2)3Ph, R3 = H, R4 = OH, X = O, dashed line = single bond] was prepared from 10β-hydroxycodeinone (I; R1 = Me, R2 = R3 = H, R4 = OMe, X = O, dashed line = double bond), via O-alkylation with cinnamyl bromide, hydrogenation of both double bonds, N-demethylation, N-alkylation with (bromomethyl)cyclopropane and O-demethylation. The invention further relates to the pharmaceutically-acceptable salts and easily-produced derivs. thereof, a process for production thereof and use thereof in the production of pharmaceutical specialties. The analgesic activity of I [R1 = cyclopropylmethyl, R2 = (CH2)3Ph, R3 = H, R4 = OH, X = O, dashed line = single bond] was determined [Ki = 0.34 nM (vs. opioid μ-receptor); ED50 = 2.3 μg/kg (mouse hot plate test, s.c. injection); ED50 = 3.2 μg/kg (mouse tail flick test, s.c. injection)].

IT 79823-82-8, 14-O-Methylnaloxone 79823-84-0, 14-O-Ethylnaloxone 92078-30-3, 14-O-Methyloxymorphone
RL: RCT (Reactant); RACT (Reactant or reagent)
(N-methylation of; preparation of morphinan derivs. and quaternary ammonium salts thereof and use as analgesics or as opioid antagonists)

RN 79823-82-8 CAPLUS

CN Morphinan-6-one, 4,5-epoxy-3-hydroxy-14-methoxy-17-(2-propenyl)-, (5α)- (9CI) (CA INDEX NAME)

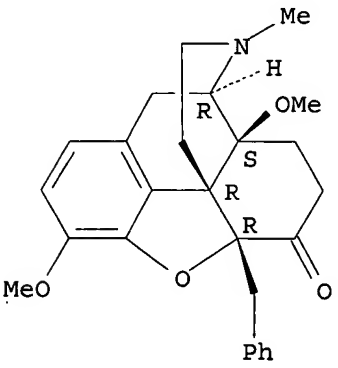
Absolute stereochemistry.



● HCl

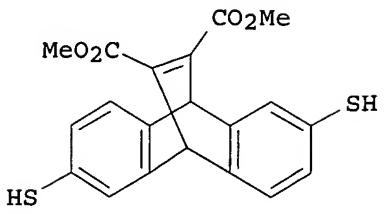
IT 646032-16-8P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation, regioselective O-demethylation and analgesic activity of; preparation of morphinan derivs. and quaternary ammonium salts thereof and use as analgesics or as opioid antagonists)
RN 646032-16-8 CAPLUS
CN Morphinan-6-one, 4,5-epoxy-3,14-dimethoxy-17-methyl-5-(phenylmethyl)-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 8 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:571805 CAPLUS
DOCUMENT NUMBER: 138:73244
TITLE: Selection and amplification of hosts from dynamic combinatorial libraries of macrocyclic disulfides
AUTHOR(S): Otto, Sijbren; Furlan, Ricardo L. E.; Sanders, Jeremy K. M.
CORPORATE SOURCE: Department of Chemistry, University of Cambridge, Cambridge, CB2 1EW, UK
SOURCE: Science (Washington, DC, United States) (2002), 297(5581), 590-593
CODEN: SCIEAS; ISSN: 0036-8075
PUBLISHER: American Association for the Advancement of Science
DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:73244
GI



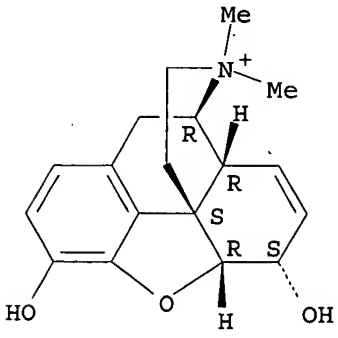
I

AB Two receptors for two different guests were formed from a single dynamic combinatorial library, prepared by reaction of the Diels-Alder adduct I with 3,5-(HS)2C6H3CO2H in presence of N-methylisoquinolinium iodide or by cyclotrimerization of I in presence of N-methylmorpholinium iodide. Each of these two guests amplifies the formation of a tightly binding host at the expense of unfit library members. Small differences in host-guest binding translate into useful differences in amplification. The selected hosts could be readily synthesized using biased dynamic libraries that contain only the right ratio of those building blocks that were selected by the guests. These results establish dynamic combinatorial chemical as a practical method not only for the discovery but also for the synthesis of new receptors.

IT 14054-17-2P, N-Methylmorphine iodide
RL: CAT (Catalyst use); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(selection and amplification of hosts from dynamic combinatorial libraries of macrocyclic disulfides)

RN 14054-17-2 CAPLUS
CN Morphinanium, 7,8-didehydro-4,5-epoxy-3,6-dihydroxy-17,17-dimethyl-, iodide, (5α,6α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



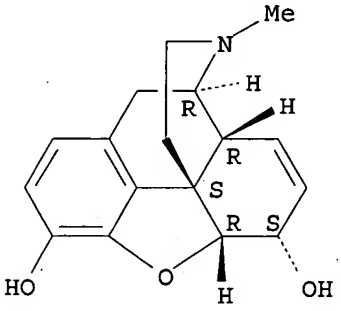
● I-

IT 482353-93-5P 482353-97-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(selection and amplification of hosts from dynamic combinatorial libraries of macrocyclic disulfides)

RN 482353-93-5 CAPLUS

IT 57-27-2, Morphine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(selection and amplification of hosts from dynamic combinatorial libraries of macrocyclic disulfides)
RN 57-27-2 CAPLUS
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-, (5α,6α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

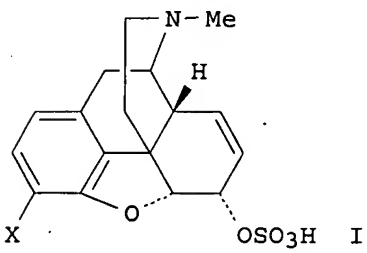


REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 9 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:444495 CAPLUS
DOCUMENT NUMBER: 137:20493
TITLE: Preparation of morphine-6-sulfate analogues and their use for the treatment of pain
INVENTOR(S): Crooks, Peter A.; Houdi, Abdulghani A.; Kottayil, Santosh G.; Butterfield, D. Allen
PATENT ASSIGNEE(S): The University of Kentucky Research Foundation, USA
SOURCE: U.S., 36 pp., Cont. of U.S. Ser. No. 881,288, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6403602	B1	20020611	US 1997-40240	19971231
PRIORITY APPLN. INFO.:			US 1997-803312	B2 19970220
			US 1997-881288	B1 19970624

OTHER SOURCE(S): MARPAT 137:20493
GI



I

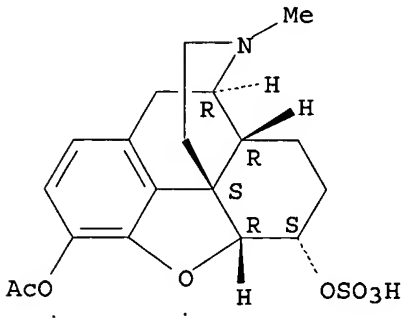
AB 3-O-Acetylmorphine-6-sulfate analogs, such as I [X = OR2, OCOR3, OCONHR4; R2 = H, alkyl; R3 = H, Ph, alkyl, cycloalkyl, arylalkyl, alkenyl, alkynyl; R4 = H, alkyl, arylalkyl, alkenyl, alkynyl, etc.], were prepared for therapeutic use as potent, centrally-acting analgesics. The compds. are useful for the treatment of pain. Thus, morphine was 3-O-acetylated using acetic anhydride. The acetylated derivative was then converted to 3-O-acetylmorphine-6-sulfate I (X = OCOMe) with 63.5% yield using pyridine:SO3 in pyridine. The prepared 3-O-acetylmorphine-6-sulfate analogs were tested for μ, δ, κ1, κ2, and κ3 opioid receptor binding activity.

IT 173484-64-5P, 3-O-Acetyl-7,8-dihydromorphine-6-O-sulfate 175479-21-7P, 3-O-Acetylmorphine-6-O-sulfate 175479-22-8P, 3-O-Benzoylmorphine-6-O-sulfate 206256-77-1P, 3-O-Propionylmorphine-6-O-sulfate 435339-60-9P, 3-O-Isobutyrylmorphine-6-O-sulfate 435339-61-0P, 3-O-Pivaloylmorphine-6-O-sulfate
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of morphine-6-sulfate analogs and their therapeutic use for the treatment of pain)

RN 173484-64-5 CAPLUS

CN Morphinan-3,6-diol, 4,5-epoxy-17-methyl-, 3-acetate 6-(hydrogen sulfate), (5α,6α)- (9CI) (CA INDEX NAME)

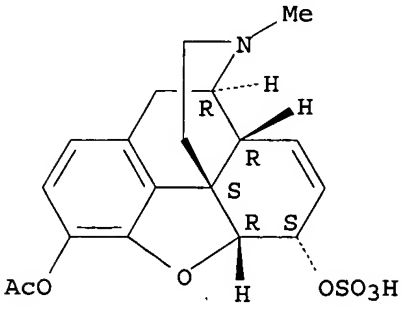
Absolute stereochemistry.



RN 175479-21-7 CAPLUS

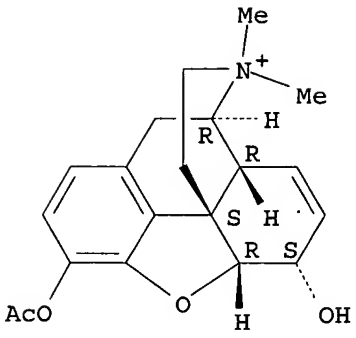
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5α,6α)-, 3-acetate 6-(hydrogen sulfate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 175479-22-8 CAPLUS

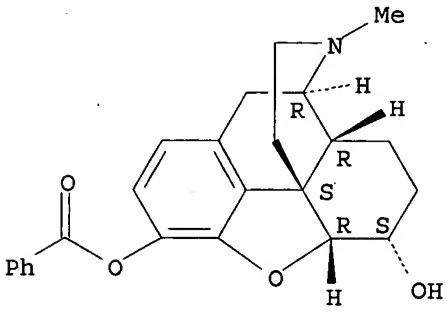
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-



● I^-

RN 302965-12-4 CAPLUS
CN Morphinan-3,6-diol, 4,5-epoxy-17-methyl-, 3-benzoate, (5α,6α)-(9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



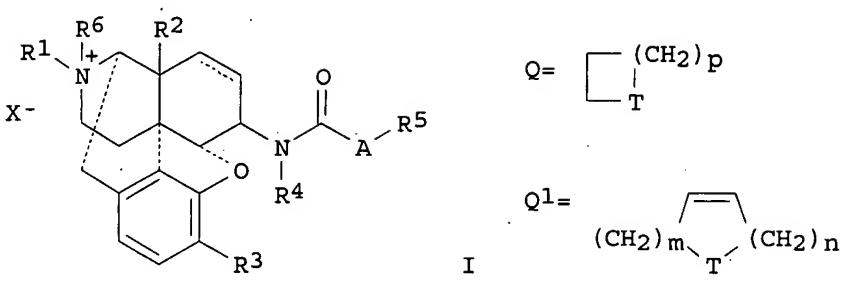
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 10 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:152688 CAPLUS
DOCUMENT NUMBER: 134:193606
TITLE: Analgesics containing as the active ingredient quaternary ammonium salt derivatives of morphinan
INVENTOR(S): Nagase, Hiroshi; Miyamoto, Tohru; Kawamura, Kuniaki; Endoh, Takashi; Sekiyama, Hiroshi
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

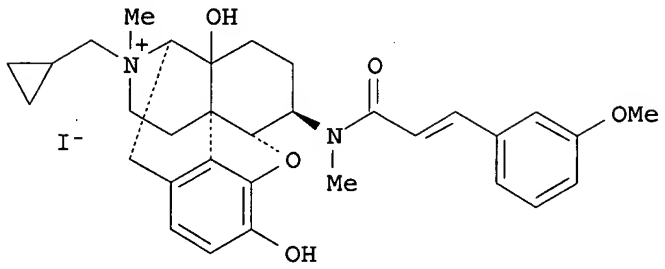
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001014382	A1	20010301	WO 2000-JP5626	20000823
W: CA, CN, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				

PRIORITY APPLN. INFO.: US 1999-149903P P 19990823

OTHER SOURCE(S): MARPAT 134:193606
GI



I



II

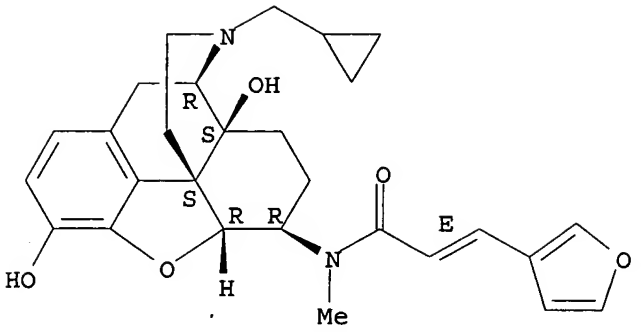
AB Described are analgesics exerting an excellent analgesic effect and containing as the active ingredient quaternary ammonium salt derivs. [I; a solid line accompanied by a dotted line = a double or single bond; R1 = C1-5 alkyl, C4-7 cycloalkyl, C5-7 cycloalkenylalkyl, C7-13 aralkyl, C4-7 alkenyl, allyl; R2 = H, OH, NO2, C1-5 alkanoyloxy, C1-5 alkoxy or alkyl; R3 = H, HO, C1-5 alkanoyloxy or alkoxy; R4 = H, linear or branched C1-5 alkyl, C6-12 aryl; A = C1-6 alkylene, CH:CH, C.tplbond.C; R5 = (un)substituted Ph, naphthyl, fluorenyl, furyl, thienyl, benzofuryl, benzothienyl, Q, or Q1; T = CH2, O; p = 0-5; m, n≥0; m+n≤5; R6 = C1-5 alkyl, allyl; X- = pharmacol. acceptable counter ion] of morphinan including the compound represented by formula (II). These compds. are selective agonists for κ receptor. Thus, 17-cyclopropylmethyl-3,14β-dihydroxy-4,5α-epoxy-6β-[N-methyl-trans-3-(3-methoxyphenyl)acrylamido]morphinan, EtOAc, MeOH, and Me iodide were heated at 100° for 4 days in a sealed tube to give II. II in vitro inhibited the elec. shock-induced contraction of guinea pig's ileum with IC50 of 6.71 nM.

IT 208042-40-4P 208042-41-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quaternary ammonium salt derivs. of morphinan as analgesics)

RN 208042-40-4 CAPLUS

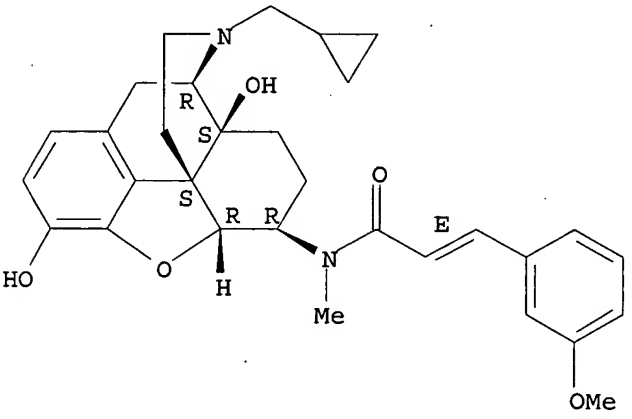
CN Morphinanium, 17-(cyclopropylmethyl)-4,5-epoxy-6-[[(2E)-3-(3-furanyl)-1-oxo-2-propenyl]methylamino]-3,14-dihydroxy-17-methyl-, iodide, (5α,6β)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 152657-88-0 CAPLUS
CN 2-Propenamide, N-[(5α,6β)-17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxymorphinan-6-yl]-3-(3-methoxyphenyl)-N-methyl-, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 11 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:152480 CAPLUS
DOCUMENT NUMBER: 134:198105
TITLE: Compositions for treating opiate intolerance with (R)-N-methylnalorphine
INVENTOR(S): Cooper, Barrett R.
PATENT ASSIGNEE(S): Critical Care Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013909	A2	20010301	WO 2000-US23264	20000824
WO 2001013909	A3	20010525		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,

HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2380524	AA	20010301	CA 2000-2380524		20000824
EP 1206264	A2	20020522	EP 2000-957776		20000824
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL					
US 6455537	B1	20020924	US 2000-648496		20000825
US 2003018043	A1	20030123	US 2002-215305		20020808
PRIORITY APPLN. INFO.:			US 1999-150739P	P	19990825
			WO 2000-US23264	W	20000824
			US 2000-648496	A3	20000825

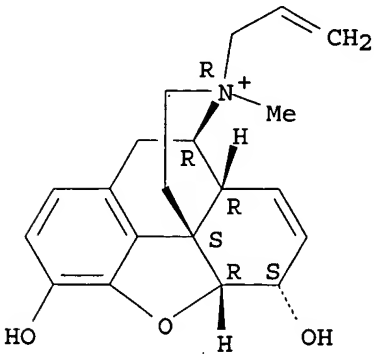
AB Compns. are provided comprising an opiate analgesic and an active compound containing the R-isomer of N-methylnalorphine in a pharmaceutically acceptable carrier. Also provided are methods of treating opiate intolerance by administration of an active compound containing (R)-N-methylnalorphine or its salt. The active compound may be administered either acutely or chronically to subjects receiving opiate treatment. Further provided are methods of inducing analgesia by administering to a subject an opiate analgesic concurrently with an active compound containing (R)-N-methylnalorphine or its salt. Thus, (R)-N-methylnalorphine iodide was prepared by the reaction of nalorphine and Me iodide. Tablets were prepared containing 100 mg (R)-N-methylnalorphine.

IT 15524-97-7P 328067-08-9DP, salts 328067-09-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(compns. for treating opiate intolerance with (R)-N-methylnalorphine)

RN 15524-97-7 CAPLUS

CN Morphinanium, 7,8-didehydro-4,5-epoxy-3,6-dihydroxy-17-methyl-17-(2-propenyl)-, iodide, (5α,6α,17R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

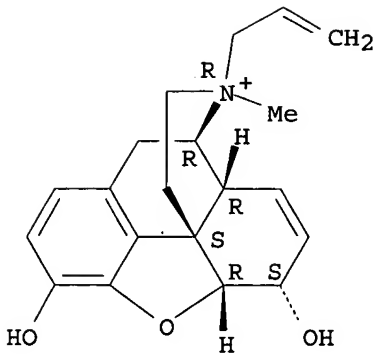


● I⁻

RN 328067-08-9 CAPLUS

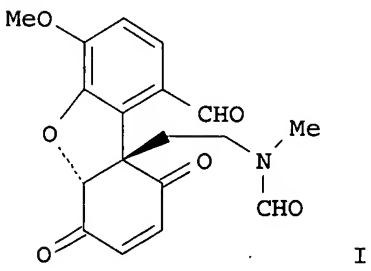
CN Morphinanium, 7,8-didehydro-4,5-epoxy-3,6-dihydroxy-17-methyl-17-(2-propenyl)-, (5α,6α,17R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

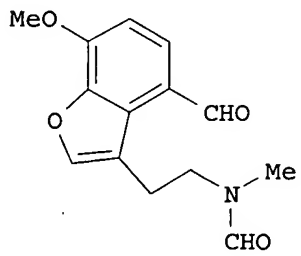


● Br^-

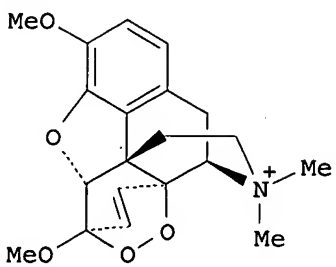
L9 ANSWER 12 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:443033 CAPLUS
DOCUMENT NUMBER: 133:177333
TITLE: The [4 + 2] Addition of Singlet Oxygen to Thebaine: New Access to Highly Functionalized Morphine Derivatives via Opioid Endoperoxides
AUTHOR(S): Lopez, Dolores; Quinoa, Emilio; Riguera, Ricardo
CORPORATE SOURCE: Departamento de Quimica Organica Facultad de Quimica and Instituto de Acuicultura, Universidad de Santiago de Compostela, Santiago de Compostela, 15706, Spain
SOURCE: Journal of Organic Chemistry (2000), 65(15), 4671-4678
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 133:177333
GI



I



II



III

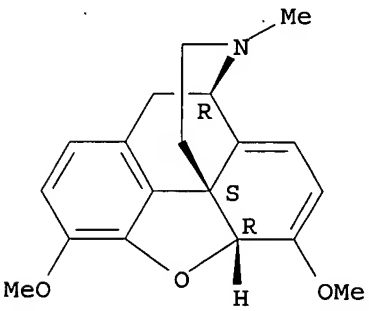
AB The photooxidn. of thebaine with a sun lamp affords two main products: hydrodibenzofuran I (major) and benzofuran II (minor). The latter compound becomes predominant if a Hg lamp is used instead of a sun lamp. The formation of I proceeds via an endoperoxide intermediate that undergoes oxidation at the nitrogen atom. Protection of the nitrogen either by protonation or quaternization prevents its oxidation and thus the photooxidn. of thebaine in acid media constitutes a one-pot procedure for the preparation of 14-hydroxycodeinone. Photooxidn. of the thebaine ammonium salt allows the isolation in good yields of the corresponding to thebaine endoperoxide III. The selective protection and reduction of the keto, aldehyde, and olefinic groups of hydrodibenzofuran I allowed the preparation of several diol and keto alc. derivs. This is the first report on the use of photooxidn. to functionalize thebaine at C(6) and C(14) and also the first on the isolation of opioid endoperoxides.

IT 115-37-7, Thebaine
RL: PEP (Physical, engineering or chemical process); RCT (Reactant); PROC (Process); RACT (Reactant or reagent)
(preparation of functionalized morphine derivs. via photooxidn. of thebaine)

RN 115-37-7 CAPLUS

CN Morphinan, 6,7,8,14-tetradehydro-4,5-epoxy-3,6-dimethoxy-17-methyl-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 157738-81-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of functionalized morphine derivs. via photooxidn. of thebaine)

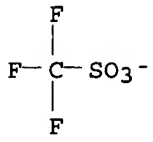
RN 157738-81-3 CAPLUS

CN Morphinanium, 6,7,8,14-tetradehydro-4,5-epoxy-3,6-dimethoxy-17,17-dimethyl-, (5α)-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 47318-25-2
CMF C20 H24 N O3

Absolute stereochemistry. Rotation (+).

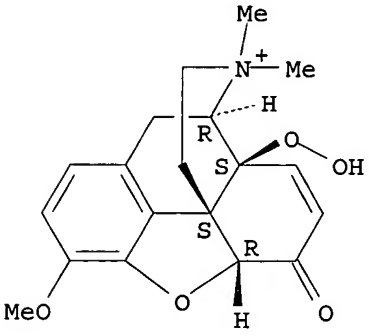


RN 232274-30-5 CAPLUS
CN Morphinanium, 7,8-didehydro-4,5-epoxy-14-hydroperoxy-3-methoxy-17,17-dimethyl-6-oxo-, (5α)-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

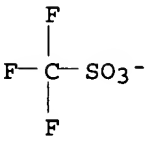
CRN 232274-29-2
CMF C19 H22 N O5

Absolute stereochemistry.



CM 2

CRN 37181-39-8
CMF C F3 O3 S



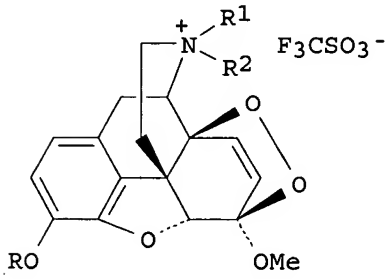
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 13 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:502950 CAPLUS
DOCUMENT NUMBER: 131:116395
TITLE: Preparation of 6,14-epidioxymorphine alkaloids via photooxidation
INVENTOR(S): Riqguera Vega, Ricardo; Quinoa Cabana, Emilio; Lopez Souto, Maria Dolores
PATENT ASSIGNEE(S): Universidad de Santiago de Compostela, Spain
SOURCE: Span., 8 pp.
CODEN: SPXXAD
DOCUMENT TYPE: Patent

LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ES 2121553	A1	19981116	ES 1996-2717	19961223
ES 2121553	B1	19990616		

PRIORITY APPLN. INFO.: ES 1996-2717 19961223
OTHER SOURCE(S): CASREACT 131:116395; MARPAT 131:116395
GI



I

AB A method for the preparation of 6,14-epidioxymorphines I [R = H, Me, benzyl, acetyl, alkyl, cycloalkyl, alkenyl; R1, R2 = Me, benzyl, alkyl, cycloalkyl, alkenyl] via photooxidn. of the corresponding thebaine analogs was described. Thus, thebaine was converted to its Me trifluoromethanesulfonate quaternary salt which subsequently underwent irradiation in the presence of tetraphenylporphyrin (TPP) and O2 in CH2Cl2 to form 6,14-epidioxymorphine I (R = R1 = R2 = Me) in 85% yield.

IT 157738-81-3P
RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 6,14-epidioxymorphine alkaloids via photooxidn.)

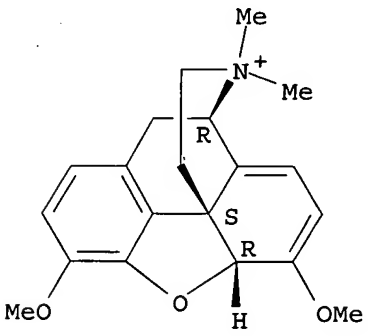
RN 157738-81-3 CAPLUS

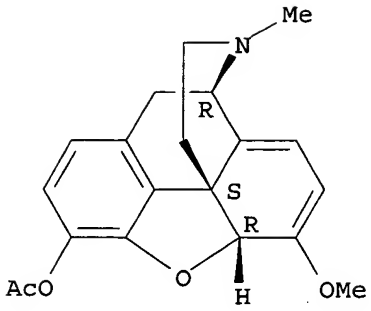
CN Morphinanium, 6,7,8,14-tetradehydro-4,5-epoxy-3,6-dimethoxy-17,17-dimethyl-, (5α)-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 47318-25-2
CMF C20 H24 N O3

Absolute stereochemistry. Rotation (+).

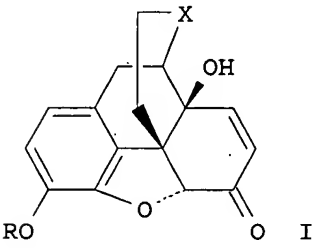




L9 ANSWER 14 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:502949 CAPLUS
DOCUMENT NUMBER: 131:116394
TITLE: Preparation of 14-hydroxymorphinones via photooxidn. of morphine alkaloids
INVENTOR(S): Riguera Vega, Ricardo; Quinoa Cabana, Emilio; Lopez Souto, Maria Dolores
PATENT ASSIGNEE(S): Universidad de Santiago de Compostela, Spain
SOURCE: Span., 11 pp.
CODEN: SPXXAD
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ES 2121554	A1	19981116	ES 1996-2718	19961223
ES 2121554	B1	19990616		
PRIORITY APPLN. INFO.:			ES 1996-2718	19961223

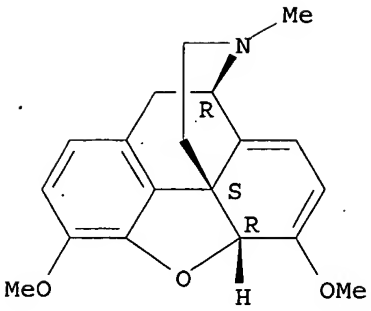
OTHER SOURCE(S): CASREACT 131:116394; MARPAT 131:116394
GI



I

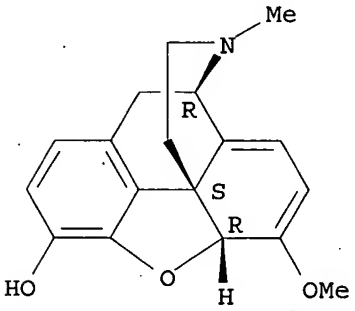
AB A method for the preparation of 14-hydroxymorphinones I [R = H, Me, benzyl, acetyl, alkyl, cycloalkyl, alkenyl; X = NR1; X = N+R1R2Y-; R1, R2 = Me, benzyl, alkyl, cycloalkyl, alkenyl, Y- = F3CCO2-, F3CSO3-] via photooxidn. of the corresponding thebaine analogs in an acidic medium was described. Thus, thebaine underwent irradiation in the presence of tetraphenylporphyrin (TPP), O2, and trifluoroacetic acid in CH2Cl2 at pH = 2 to form 14-hydroxycodeinone trifluoroacetate salt in 61% yield.

IT 157738-81-3P 157738-84-6P 232274-16-7P
232274-19-0P 232274-30-5P 232274-33-8P
232274-36-1P
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)



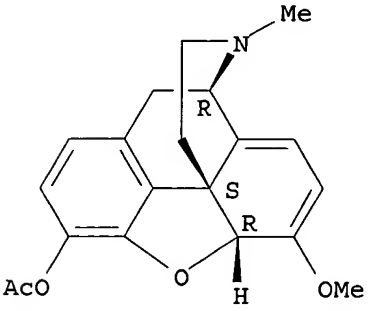
RN 467-04-9 CAPLUS
CN Morphinan-3-ol, 6,7,8,14-tetradehydro-4,5-epoxy-6-methoxy-17-methyl-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 57093-47-7 CAPLUS
CN Morphinan-3-ol, 6,7,8,14-tetradehydro-4,5-epoxy-6-methoxy-17-methyl-, acetate (ester), (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L9 ANSWER 15 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:385518 CAPLUS
DOCUMENT NUMBER: 129:23446
TITLE: Antipruritic agent
INVENTOR(S): Nagase, Hiroshi; Utsumi, Jun; Endoh, Takashi; Tanaka, Toshiaki; Kamei, Junzo; Kawamura, Kuniaki
PATENT ASSIGNEE(S): Toray Industries, Inc., Japan
SOURCE: PCT Int. Appl., 92 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

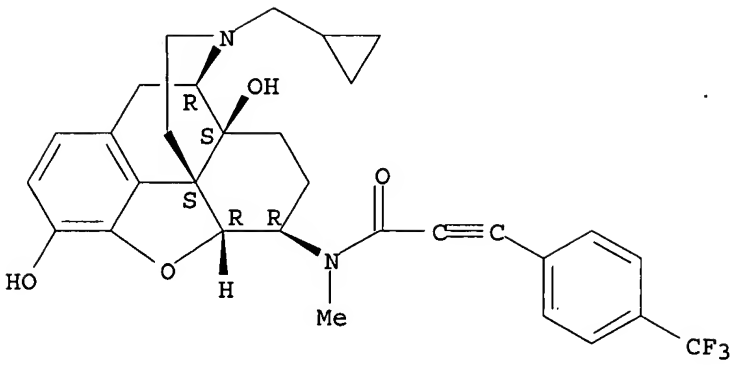
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9823290	A1	19980604	WO 1997-JP4267	19971121
W: AU, CA, CN, JP, KR, NO, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2244256	AA	19980604	CA 1997-2244256	19971121
CA 2244256	C	20060711		
AU 9749683	A1	19980622	AU 1997-49683	19971121
AU 738743	B2	20010927		
EP 897726	A1	19990224	EP 1997-912539	19971121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
CN 1214634	A	19990421	CN 1997-193343	19971121
NZ 331001	A	20000526	NZ 1997-331001	19971121
JP 2003128546	A2	20030508	JP 2002-311184	19971121
JP 2003128554	A2	20030508	JP 2002-311185	19971121
JP 2003128545	A2	20030508	JP 2002-311186	19971121
EP 1310255	A1	20030514	EP 2003-1740	19971121
EP 1310255	B1	20040407		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
EP 1310251	A1	20030514	EP 2003-1741	19971121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
EP 1312361	A1	20030521	EP 2003-1723	19971121
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
EP 1327444	A1	20030716	EP 2003-1739	19971121
EP 1327444	B1	20050323		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI				
AT 263563	E	20040415	AT 2003-1740	19971121
JP 3531170	B2	20040524	JP 1998-524506	19971121
CN 1530111	A	20040922	CN 2003-10122597	19971121
ES 2215158	T3	20041001	ES 2003-1740	19971121
CN 1535687	A	20041013	CN 2003-10123373	19971121
AT 291429	E	20050415	AT 2003-1739	19971121
ES 2236630	T3	20050716	ES 2003-1739	19971121
TW 542838	B	20030721	TW 1997-86117591	19971124
NO 9803431	A	19980924	NO 1998-3431	19980724
NO 316309	B1	20040112		
US 6174891	B1	20010116	US 1998-117052	19980824
US 6316461	B1	20011113	US 2000-615540	20000713
US 6440987	B2	20020827	US 2001-970978	20011004
US 2002137760	A1	20020926		

PRIORITY APPLN. INFO.:		
JP 1996-313476	A	19961125
EP 1997-912539	A3	19971121
JP 1998-524506	A3	19971121
WO 1997-JP4267	W	19971121
US 1998-117052	A3	19980824
US 2000-615540	A3	20000713

OTHER SOURCE(S): MARPAT 129:23446

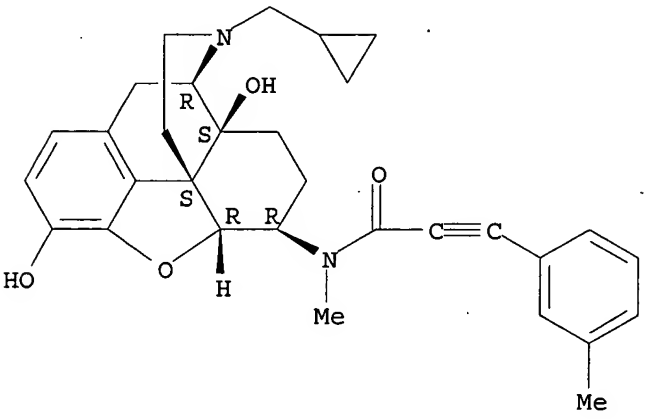
AB An antipruritic agent comprising an opioid κ receptor agonist which is useful for the treatment of pruritus in various diseases accompanied by pruritus, morphinan quaternary ammonium salt derivs. and morphinan N-oxide derivs. Thus, 17-cyclopropylmethyl-3,14β-dihydroxy-4,5α-epoxy-6β-[N-methyl-trans-3-(3-furyl)acrylamido]morphinan 2.0699 g was reacted with 1.3 mL Me iodide to give 17-cyclopropylmethyl-3,14β-dihydroxy-4,5α-epoxy-17-methyl-6β-[N-methyl-trans-3-(3-furyl]acrylamido)morphinan iodide 102 mg, which showed Ke value 16.67 nM in the presence of a μ antagonism naloxone (100 nM) for an ileum sample of guinea pig, and Ke value 14.18 nM in the presence of naloxone (30 nM) for a spermatic duct of a mouse.

IT 208042-40-4P 208042-41-5P



RN 162884-42-6 CAPLUS
CN 2-Propynamide, N-[(5α,6β)-17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxymorphinan-6-yl]-N-methyl-3-(3-methylphenyl)- (9CI) (CA INDEX NAME)

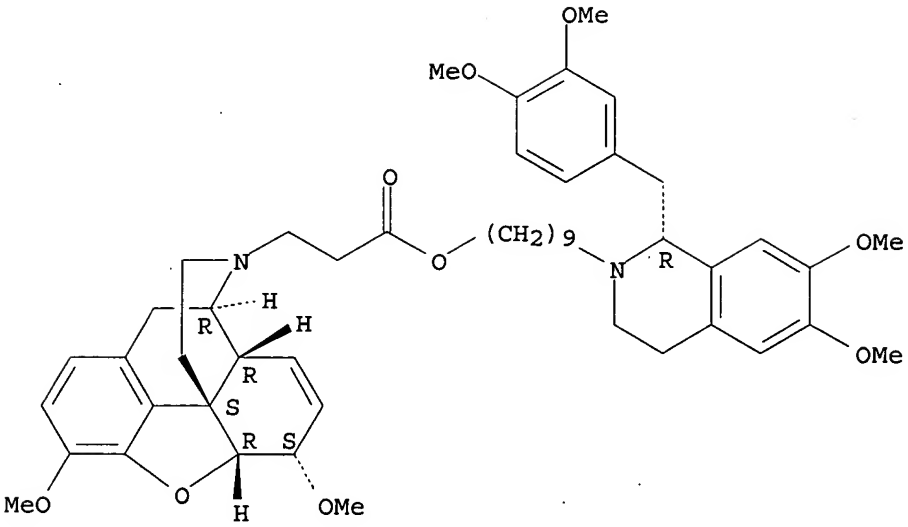
Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

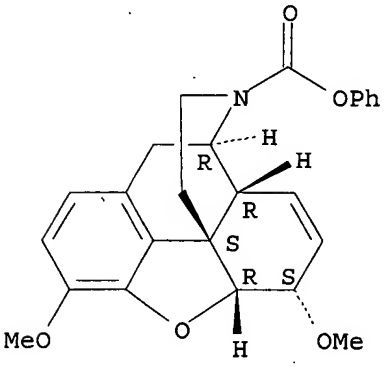
L9 ANSWER 16 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:6875 CAPLUS
DOCUMENT NUMBER: 124:176590
TITLE: Approaches to Short-Acting Neuromuscular Blocking Agents: Nonsymmetrical Bis-tetrahydroisoquinolinium Mono- and Diesters
AUTHOR(S): Dhar, Nirmal C.; Maehr, Robert B.; Masterson, Luke A.; Midgley, John M.; Stenlake, John B.; Wastila, William B.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Strathclyde, Glasgow, G1 1XW, UK
SOURCE: Journal of Medicinal Chemistry (1996), 39(2), 556-61
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Nonsym. bisquaternary mono- and diesters combining the potency-enhancing properties of the (1R)-laudanosinium group with a second unhindered quaternary ammonium moiety have been studied as a means of promoting short action with high-potency neuromuscular block. Atracurium-related nonsym.

Absolute stereochemistry.

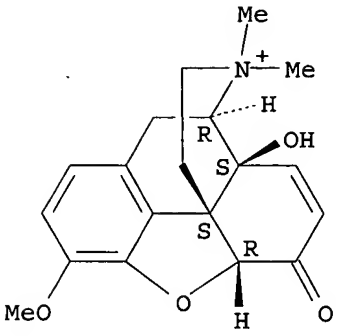


RN 173677-21-9 CAPLUS
CN Morphinan-17-carboxylic acid, 7,8-didehydro-4,5-epoxy-3,6-dimethoxy-, phenyl ester, (5α,6α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

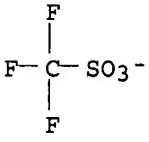


L9 ANSWER 17 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:579928 CAPLUS
DOCUMENT NUMBER: 121:179928
TITLE: Photooxidation of thebaine. A route to 14-hydroxymorphinones and hydrodibenzofuran analogs of methadone
AUTHOR(S): Lopez, Dolores; Quinoa, Emilio; Riguera, Ricardo
CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Quimica, Santiago de Compostela, Spain
SOURCE: Tetrahedron Letters (1994), 35(31), 5727-30
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 121:179928
GI

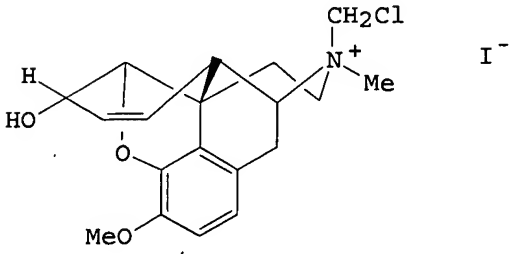


CM 2

CRN 37181-39-8
CMF C F3 O3 S

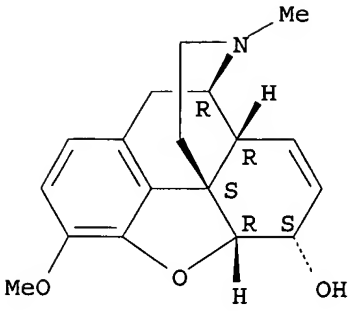


L9 ANSWER 18 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:107425 CAPLUS
DOCUMENT NUMBER: 120:107425
TITLE: The chloromethylation of codeine. Isolation of a quaternary iodide
AUTHOR(S): Grant, Andrew D.; Zacharias, David E.; Mascavage, Linda M.; Kemmerer, George E.; Dalton, David R.
CORPORATE SOURCE: NORAMCO Delaware, Wilmington, DE, 19801, USA
SOURCE: Journal of Heterocyclic Chemistry (1993), 30(2), 553-7
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

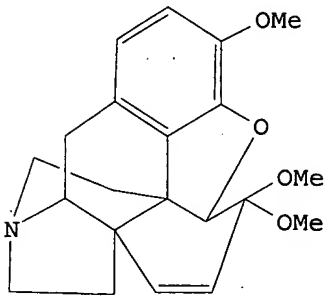


I

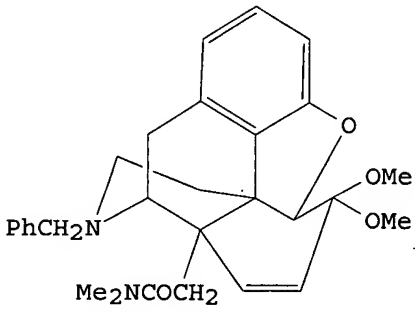
AB A single N-chloromethylcodinium iodide (I) has been isolated from the reaction of chloroiodomethane with codeine. Complete proton and carbon NMR and x-ray analyses indicate that this stable material bears the chloromethyl group axial. It is identical (except for the anion) to one



L9 ANSWER 19 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:59930 CAPLUS
DOCUMENT NUMBER: 118:59930
TITLE: 14,17-Ethanonorcodeinones
AUTHOR(S): Fleischhacker, W.; Richter, B.
CORPORATE SOURCE: Inst. Pharm. Chem., Univ. Wien, Vienna, A-1090, Austria
SOURCE: Monatshefte fuer Chemie (1992), 123(8-9), 837-48
CODEN: MOCMB7; ISSN: 0026-9247
DOCUMENT TYPE: Journal
LANGUAGE: German
GI



I



II

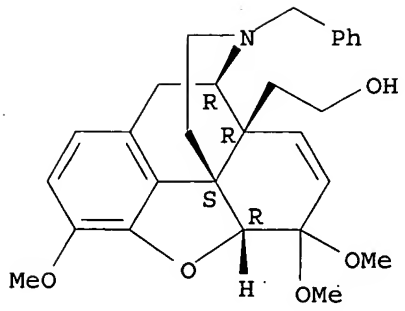
AB The new codeinone derivative I was synthesized from northebaine via the norcodeinone II.

IT 72221-15-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and bromination-oxidation of)

RN 72221-15-9 CAPLUS

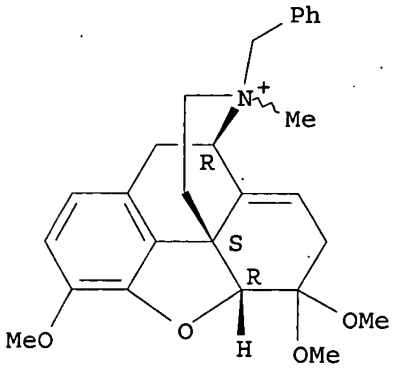
CN Morphinan, 6,7,8,14-tetradehydro-4,5-epoxy-3,6-dimethoxy-17-(phenylmethyl)-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 145430-21-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 145430-21-3 CAPLUS
CN Morphinanium, 8,14-didehydro-4,5-epoxy-3,6,6-trimethoxy-17-methyl-17-(phenylmethyl)-, iodide, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

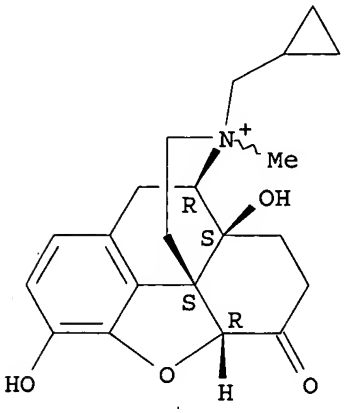


● I⁻

L9 ANSWER 20 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:152106 CAPLUS
DOCUMENT NUMBER: 116:152106
TITLE: Synthesis of 6-methoxymethylmorphinol
AUTHOR(S): Valhari, M. U.; Rahman, A. U.; Memon, M. U.; Nachnani, F. C.; Khan, M. Y.
CORPORATE SOURCE: Inst. Chem., Univ. Sindh, Jamshoro, Pak.
SOURCE: Journal of the Chemical Society of Pakistan (1991), 13(3), 169-73
CODEN: JCSPDF; ISSN: 0253-5106
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

RN 125292-47-9 CAPLUS
CN Morphinanium, 17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxy-17-methyl-6-oxo-, bromide, (5α)-(±)- (9CI) (CA INDEX NAME)

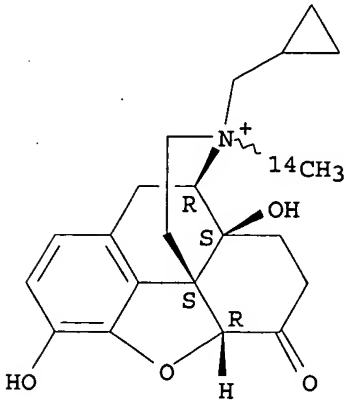
Relative stereochemistry.



● Br^-

IT 125292-48-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and demethylation in humans and laboratory animals of)
RN 125292-48-0 CAPLUS
CN Morphinanium, 17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxy-17-(methyl-14C)-6-oxo-, bromide, (5α)-(±)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

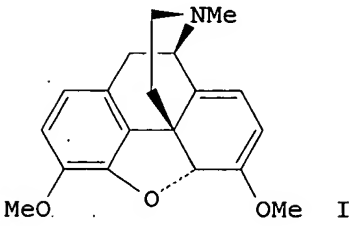


● Br^-

L9 ANSWER 22 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1987:598716 CAPLUS
DOCUMENT NUMBER: 107:198716
TITLE: Stereoselectivity in quaternization of thebaine. 270 MHz PMR spectroscopic studies

10/530,446

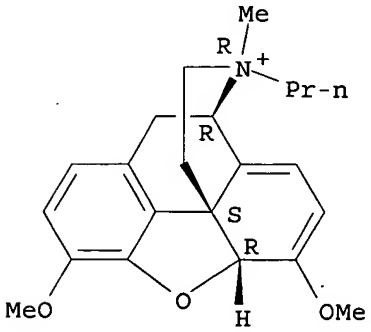
AUTHOR(S): Manoharan, T Samuel; Madhyastha, K. Madhava
CORPORATE SOURCE: Dep. Org. Chem., Indian Inst. Sci., Bangalore, 560 012, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1987), 26B(2), 140-2
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 107:198716
GI



I

AB The quaternization of thebaine (I) with Pr iodide and iso-Pr iodide was studied by PMR spectroscopy. The results indicate that the major diastereomer is formed to the extent of .apprx.75% of the diastereomeric mixture by axial attack of the alkyl halide. There is no significant change in the ratio of the diastereomers with solvent or with large excess of the alkyl halide used. The diastereomers were separated by column chromatog. on neutral alumina, characterized by various phys. data and the configuration at the quaternary nitrogen assigned on the basis of PMR spectra (270 MHz). The stereoselectivity in quaternization further proved by reverse quaternization.
IT 111009-99-5P 111010-00-5P 111010-01-6P
111010-02-7P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and NMR of)
RN 111009-99-5 CAPLUS
CN Morphinanium, 6,7,8,14-tetradehydro-4,5-epoxy-3,6-dimethoxy-17-methyl-17-propyl-, iodide, (5α,17R)- (9CI) (CA INDEX NAME)

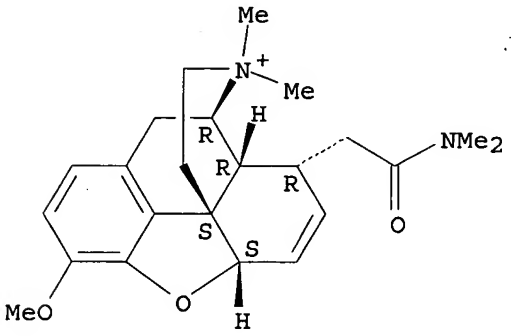
Absolute stereochemistry.



● I⁻

IT 76971-40-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and ring cleavage of)
RN 76971-40-9 CAPLUS
CN Morphinanium, 6,7-didehydro-8-[2-(dimethylamino)-2-oxoethyl]-4,5-epoxy-3-methoxy-17,17-dimethyl-, iodide, (5α,8α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

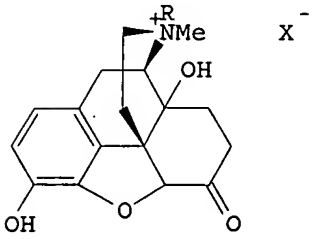


● I⁻

L9 ANSWER 30 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1980:147018 CAPLUS
DOCUMENT NUMBER: 92:147018
TITLE: Quaternary derivatives of noroxymorphone which relieve intestinal immobility
INVENTOR(S): Goldberg, Leon I.; Merz, Herbert; Stockhaus, Klaus
PATENT ASSIGNEE(S): Boehringer Ingelheim G.m.b.H., Fed. Rep. Ger.
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4176186	A	19791127	US 1978-928821	19780728

PRIORITY APPLN. INFO.: US 1978-928821 19780728
OTHER SOURCE(S): MARPAT 92:147018
GI



I

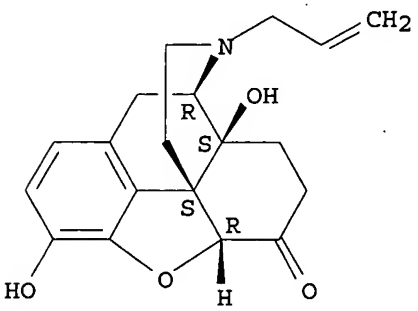
AB The noroxymorphone derivs. I (R = allyl, chloroalkyl, cyclopropylmethyl, HC.tplbond.CCH2; X = Cl, Br, iodo, MeSO4) were prepared Thus, N-allylnoroxymorphone-HCl was treated with NH3 followed by MeI to give I (R = alkyl, X = iodide). I prevent intestinal mobility inhibiting side-effects of narcotic analgesics (no data).

IT 465-65-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(acetylation of)

RN 465-65-6 CAPLUS

CN Morphinan-6-one, 4,5-epoxy-3,14-dihydroxy-17-(2-propenyl)-, (5α)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

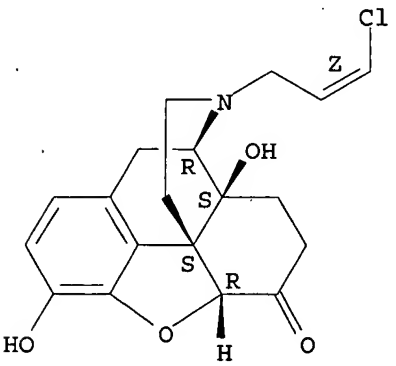


IT 73232-45-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation and methylation of)

RN 73232-45-8 CAPLUS

CN Morphinan-6-one, 17-(3-chloro-2-propenyl)-4,5-epoxy-3,14-dihydroxy-, [5α,17(Z)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT 73197-77-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)

RN 73197-77-0 CAPLUS

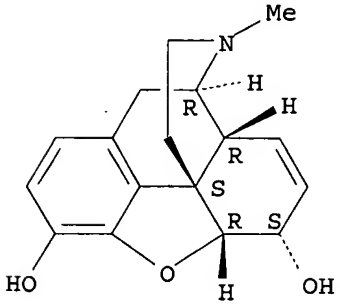
CN Morphinan-6-one, 17-(3-chloro-2-propenyl)-4,5-epoxy-3,14-dihydroxy-, [5α,17(E)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Me—O—SO_3^-

L9 ANSWER 41 OF 41 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1967:411621 CAPLUS
DOCUMENT NUMBER: 67:11621
TITLE: Selective quaternization of compounds with morphine skeleton
AUTHOR(S): Koczka, Karoly; Bernath, Gabor
CORPORATE SOURCE: A. Jozsef Univ., Szeged, Hung.
SOURCE: Acta. Chim. Acad. Sci. Hung. (1967), 51(4), 393-402
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Quaternization of 5.0 g. morphine in 65 ml.MeOH with 4.0 g. CH2:CHCH2I (2 weeks at room temperature) gave mainly N-allylmorphine iodide (I) and a smaller amount of the stereoisomeric N-allylnormorphine methiodide (II). Similarly, N-allylnormorphine (III) and MeI gave mainly II and a smaller amount of I. The selectivities of the quaternization reactions were further evaluated by ir spectroscopy. Reactions were carried out in CHCl3, MeOH, EtOH, and C6H6 at 4°, at room temperature, and at the b.p. of the solution Highest selectivity was observed in the reaction of III with MeI in CHCl3 at 4°, which gave less than 15% I as by-product. On raising the temperature the selectivities of both reactions decreased slightly; in reactions carried out at the b.ps. of the solns. the amount of by-product was 15-25%. When kept 80 hrs. in a sealed tube I in CHCl3 was partially isomerized to II, but similar heating of II did not result in noticeable isomerization. Under similar conditions N-benzylcodeine iodide showed considerable isomerization while N-benzylnorcodeine methiodide did not. The relative selectivities in the quaternization reactions and the isomerizations of the quaternary salts indicate that the substituent introduced during quaternization occupies an axial position in the product obtained in greater yield. The monohydrate of I m. 241-2° (H2O), [α]23D (for anhydrous I) 45.7°. The monohydrate of II m. 255-6° (90% MeOH), [α]23D (anhydrous) 110.2°.
IT 57-27-2, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(compds. related to, quaternization of)
RN 57-27-2 CAPLUS
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-, (5α,6α)- (9CI) (CA INDEX NAME)

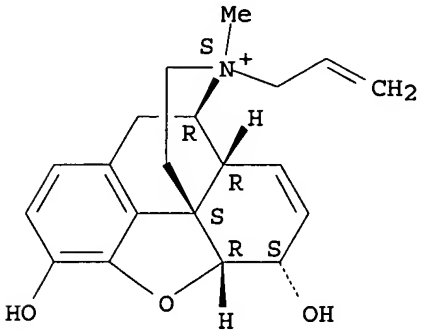
Absolute stereochemistry. Rotation (-).



IT 15524-96-6P 15524-97-7P 17899-69-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 15524-96-6 CAPLUS

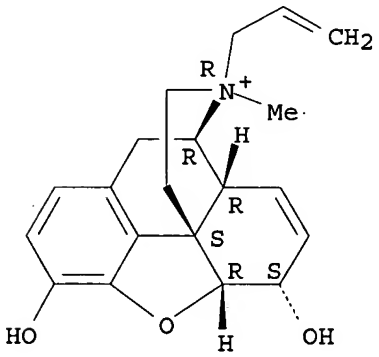
CN Morphinanium, 7,8-didehydro-4,5-epoxy-3,6-dihydroxy-17-methyl-17-(2-propenyl)-, iodide, (5α,6α,17S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



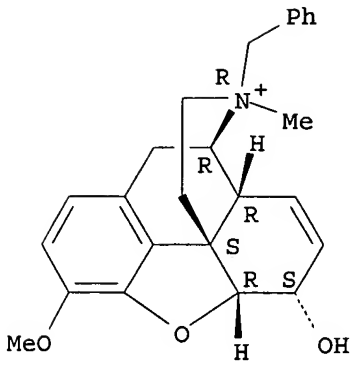
RN 15524-97-7 CAPLUS
CN Morphinanium, 7,8-didehydro-4,5-epoxy-3,6-dihydroxy-17-methyl-17-(2-propenyl)-, iodide, (5α,6α,17R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 17899-69-3 CAPLUS
CN Morphinanium, 17-benzyl-7,8-didehydro-4,5α-epoxy-6α-hydroxy-3-methoxy-17-methyl-, iodide, (17R)- (8CI) (CA INDEX NAME)

Absolute stereochemistry.



● I

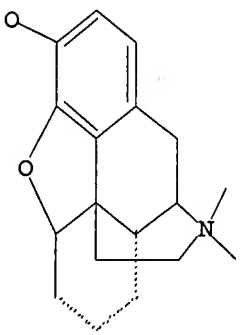
```
=> d his

     (FILE 'HOME' ENTERED AT 13:19:40 ON 04 OCT 2006)

     FILE 'REGISTRY' ENTERED AT 13:20:03 ON 04 OCT 2006
L1             STRUCTURE UPLOADED
L2              22 S L1
L3             STRUCTURE UPLOADED
L4              50 S L3
L5             352 S L1 FULL
L6           10685 S L3 FULL

     FILE 'CAPLUS' ENTERED AT 13:22:09 ON 04 OCT 2006
L7              53 S L5/PREP
L8            1738 S L6/RCT
L9              41 S L7 AND L8

=> d l1
L1 HAS NO ANSWERS
L1             STR
```

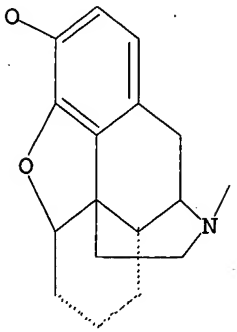


Structure attributes must be viewed using STN Express query preparation.

```
=> d l3
L3 HAS NO ANSWERS
```

10/530,446

L3 STR



Structure attributes must be viewed using STN Express query preparation.

=>